COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

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In the Matter of:

THE APPLICATION OF WESTERN KENTUCKY GAS COMPANY FOR AUTHORITY TO ADJUST ITS RATES AND CHARGES	))))	CASE NO. 8227

O R D E R

On April 20, 1981, Western Kentucky Gas Company ("Applicant"), a public utility which provides gas service to approximately 138,000 customers in central and western Kentucky, filed a notice of change in rates to be effective May 10, 1981. The proposed adjustment would increase the operating revenues of Applicant by $7,976,119, 7.13%, and was requested to meet increases in wages, materials and the cost of capital.

The Commission, in order to determine the reasonableness of the proposed rates, ordered that these rates be suspended for a period of five months on and after May 10, 1981, and set a public hearing in this matter for August 25, 1981, at 10 o'clock a.m. in its offices at Frankfort, Kentucky. Notice of the hearing was given in the manner prescribed by the Kentucky Revised Statutes and the regulations of this Commission. The Consumer Protection Division of the Attorney General's Office was the sole intervenor. The hearing was held as scheduled, the information requested at the hearing was filed and the entire matter has now been submitted to the Commission for final determination.

Test Period

Applicant proposed, and the Commission has accepted, the 12 months ending January 31, 1981, as its test period for determining the reasonableness of the proposed rates. In accordance with Commission policy, pro forma adjustments have been included when found appropriate.

Net Investment Rate Base

Applicant proposed an end-of-period net investment rate base of $51,394,935. The Commission will accept this rate base for ratemaking purposes with three exceptions. Applicant's inclusion of cash requirements in its rate base has been adjusted to reflect the pro forma level of operating expenses found reasonable. Applicant increased depreciation and amortization to an end-of-period level but failed to increase the depreciation reserve. Consistent with its policy in all rate cases, the Commission has made this corollary adjustment to the depreciation reserve. Finally, in accordance with past policy the Commission has excluded from rate base the investment and reserve applicable to acquisition adjustments.

Based on the foregoing analysis, the Commission finds Applicant's net investment rate base to be as follows:

Plant in Service	$76,783,577
Materials and Supplies	1,162,738
Gas Stored Underground	6,360,729
Prepaid Gas Purchases-Average	2,509,098
Prepayments	99,304
Cash Working Capital	1,579,968
Total Investment	$88,495,414

Less:

Reserve for Depreciation and Amortization	$ 31,415,845
Customer Advances	1,557,891
Deferred Income Taxes	4,091,743
Investment Tax Credit-Pre 1971	272,478
Total Deductions	$ 37,337,957
Original Cost Rate Base	$ 51,157,457

Reproduction Cost

Applicant presented the reproduction cost of its investment in utility plant in service. The Commission has considered this valuation method and others commonly employed by regulatory agencies. It is the Commission's opinion that net original cost, net investment and capital structure valuation methods are still the most prudent, efficient and economical measures of reasonable rate of return valuation.

Revenues and Expenses

Applicant proposed several adjustments to its income statement to reflect more current operating conditions. The Commission is of the opinion that these adjustments are proper with the following exceptions:

Revenue Normalization

Applicant is allowed to recover increases in the cost of gas through a Purchased Gas Adjustment Clause ("PGA"). When it filed this case, Applicant proposed to normalize revenues for rates approved in its most recent PGA filing, Case No. 7157-AA.(1) Applicant further proposed adjustments for normal weather and

(1) Notice Exhibit 5.

residential conservation based on the rates approved in Case No. 7157-AA. Since the filing of this application Applicant has requested and received rates to recover additional increases in the cost of gas from its suppliers. The purpose of normalizing rates for the latest approved PGA is to transfer increases in the cost of gas from the PGA to basic rates. The Commission will normalize revenues to reflect the latest PGA rates approved in Case No. 7157-JJ. Further, the Commission will allow an adjustment to reflect normal weather conditions based on the rates approved in that case. The effect of these adjustments is to increase the Applicant's end-of-period revenues by $13,826,927.

Applicant posed a conservation adjustment of $834,290 to reflect a 2% decline in mcf sales per residential customer. The adjustment was based on past reductions in average residential use per customer,(2) and no allowance was made for growth in number of customers. At the hearing Applicant introduced an adjustment for the annualization of sales to year-end customers.(3) This adjustment showed an increase in net revenues of $18,050 as compared to the proposed reduction in net revenues from residential conservation of $194,310.(4) An analysis of Applicant's year-end

(2) Response to staff request, item 8, workpaper 131.
(3) Brady Exhibit 1 and pp. 103-110 of transcript of August 25, 1981, hearing.
(4) Notice Exhibit 5, page 4.

customer adjustment shows it was calculated at a forecasted average annual use of 98 mcf per new customer rather than the normalized average test-year use of 113.4 mcf.[5] The adjustment excluded $17,452 in revenues from Applicant's higher rate for the first mcf used per month and included all operations and maintenance expenses as if they were completely variable on a per customer basis. Applicant presented no evidence to support this assumption. The Commission concludes that the year-end customer adjustment is understated and if properly calculated would offset for the most part the adjustment for residential customer conservation. Therefore, the Commission will not allow the adjustment for residential customer conservation, thereby increasing Applicant's end-of-period revenues by $834,290.

Applicant proposed an adjustment to reduce revenues by $47,389 because of elimination of penalty billing related to interruptible customer contract deficiencies. The penalty is applied during periods of curtailment when customers do not take their contract entitlement. Curtailment is not currently a problem and therefore, no revenue will be generated from this provision in the tariff. The Commission concludes this adjustment is reasonable.

Applicant also proposed to increase revenues to account for requested changes in tariff rates for returned checks, customer meter reconnections, gas transportation fees and late payment charges. Inclusion of proposed rate changes in test-year operating revenues under present rates is improper and

(5) Response to staff request, item 8, workpaper 131.

therefore the Commission has reduced test-year revenues by $94,764.

Cost of Gas

Applicant proposed an end-of-period cost of gas of $98,092,497. This amount was based on the current supplier rates reflected in Case No. 7157-AA as well as the weather normalization and conservation adjustments discussed above. The Commission has increased the cost of gas to reflect rates paid suppliers in Case No. 7157-JJ and based its weather normalization adjustment on the rates in that case. The effect of these adjustments is an increase of $13,846,031 in test-year cost of gas. The Commission's rejection of the conservation adjustment results in an increase in the cost of gas of $639,980. In addition the Commission has increased operations and maintenance expense by $31,521 in order to reflect the latest supplier rates in Case No. 7157-JJ for gas used by Applicant.

Personal Injury Settlement

During the test period Applicant settled a personal injury claim for $125,288 which it proposed to include in its pro forma operating expenses and amortize over a three-year period. This settlement was the result of an out-of-court agreement into which Applicant entered on advice of legal counsel. Even though Applicant admitted no liability in this settlement, the Commission is of the opinion that this expense should be born by Applicant's stockholders.(6) Therefore, the Commission has reduced operating expenses by $41,763.

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(6) Entry L of Application and pp. 49-51 of transcript of August 25, 1981, hearing.

Conservation Audits

Applicant originally included in its pro forma operating expenses $495,988 for conservation audits. During the hearing Applicant proposed the elimination of these expenses since they will not be incurred in the near future. The Commission concurs with this proposal and has reduced Applicant's operating expenses accordingly.[7]

Tax Effect of Decreased Debt Costs

Applicant reported Kentucky jurisdictional debt charges of $2,834,184[8] as of January 31, 1981, and end-of-period interest cost of $3,473,859.[9] The debt charges provided for herein total $3,396,707, a decrease of $77,152. The increase in income tax expense associated with this decrease in test period interest cost is $37,990, which the Commission finds is the appropriate adjustment to net operating income.

Association Expenses

During the test period Applicant paid $52,349[10] in dues to various associations, including the American Gas Association ("AGA"), and an additional $13,743[11] to AGA for its share of the expense of national magazine advertisements. Membership in these associations is voluntary. The Commission is of the opinion that the AGA provides a useful forum for the natural gas industry.

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(7) Pp. 5-6 of transcript of August 25, 1981, hearing.
(8) Notice Exhibit 6, line 17.
(9) Notice Exhibit 6, footnote 1.
(10) Response to staff request number 1, question 16B and supplementary information requested at August 25, 1981, hearing filed September 1, 1981, item number 1.
(11) Ibid, item number 2.

Applicant did not demonstrate any meaningful or measurable advantages to its customers resulting from its participation in any other organizations or from national magazine advertisements. Therefore, the Commission will allow as operating expenses only the amount paid to AGA as dues.

The following chart summarizes the Commission's findings as to the proper revenues, expenses and operating income for the test year under present rates:

	Applicant End-of-Period	Commission Adjustments	Commission End-of-Period
Operating Revenues	$117,191,778	$ 14,566,513	$131,758,291
Operating Expenses	114,326,522	14,289,301	128,615,823
Net Operating Income	$ 2,865,256	$ 277,212	$ 3,142,468

Rate of Return & Capitalization

In determining the proper rate of return in this case, the Commission has considered Applicant's capital and capital structure, cost of debt, and cost of common equity. Applicant proposed to use its actual end-of-test-year capital structure.(12) As of January 1, 1981, Applicant's total capital was $50,128,335, of which $49,652,262 was allocated to the Kentucky jurisdictional operations. The Commission concludes that the amount of capital allocated to Kentucky operations is reasonable. The Commission has allocated Job Development Investment Tax Credit ("JDIC") to

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(12) Notice Exhibit 6, p. 1

each component of the capital structure based on the relative weight of each component to total capital excluding JDIC. This practice insures that JDIC is treated as though it were provided by Applicant's debt and equity investors as required by Internal Revenue Service Regulations.

The Attorney General's witness, Mr. Rothschild, also used the end-of-test-year capital structure, but recommended that Applicant reduce its level of short-term debt.(13) Applicant's short-term debt and total capitalization fluctuate with seasonal changes in gas sales. In the test year, jurisdictional short-term debt reached a low of $3,169,900 in April and a high of $15,649,900 in November with an average balance of $9,554,516(14) and an end-of-test-year balance of $13,465,693. The Commission is of the opinion that the end-of-test-year capital structure is reasonable and that seasonal fluctuations in the level of short-term debt should be considered in determining the appropriate cost rate for short-term debt.

Applicant proposed to use its end-of-test-year embedded cost of 8.24% for long-term debt and a cost rate of 17.0% for short-term debt.(15) Mr. Rothschild also used these cost rates.(16) Applicant's actual interest rate on the average balance of short-term-debt was 15.10%(17) during the test year.

(13) Rothschild pre-filed testimony, pp. 40-41.
(14) Calculated from Notice Exhibit 6 and response to staff request item 2a.
(15) Notice Exhibit 6, p. 1.
(16) Rothschild, schedule 1.
(17) Response to staff request, item 2b.

Over the past 12 months interest rates on 3-month commercial paper averaged 15.5% and the bank prime interest rate averaged 18.1%.(18) Considering recent trends in interest rates and Applicant's seasonal fluctuations in the level of short-term debt, the Commission is of the opinion that a short-term debt cost rate of 15.25% on the end-of-test-year balance of $13,465,693 is reasonable. Further, the Commission is of the opinion that a cost rate of 8.24% is reasonable for long-term debt.

Applicant proposed a return on common equity of 16.5%.(19) Mr. Rothschild recommended a return in the range of 14.25% to 14.75%.(20) The Commission is of the opinion that a range of returns on equity of 14.25% to 15.25% is fair, just and reasonable. The Commission has determined that a return on equity in this range would not only allow Applicant to attract the capital required to insure continued service and provide for necessary expansion to meet future requirements at reasonable costs, but also would provide for the lowest possible cost to the ratepayer. Within this range of returns the Commission finds that a return on common equity of 15% should allow Applicant to attain the above objectives.

The following chart summarizes the Commission's findings on jurisdictional capital, capital structure, cost rates for debt and equity and overall cost of capital:

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(18) Average interest rates for 12 months ended August 1981, Federal Reserve Statistical Release.
(19) Notice Exhibit 6, p. 1.
(20) Rothschild, schedule 1.

	Dollar Amount	Capital Structure	Cost Rate	Overall Cost Rate
Long-Term Debt	$16,303,838	32.83%	8.24%	2.71%
Short-Term Debt	13,465,693	27.12	15.25	4.14
Common Equity	19,885,731	40.05	15.00	6.01
Total	$49,655,262	100.00%		12.86%

Application of the costs of capital found fair, just and reasonable to the capital structure approved herein produces a weighted cost of capital of approximately 12.86%. This cost of capital produces a rate of return on Applicant's net investment rate base of 12.47%, which the Commission finds is the fair, just and reasonable return in that it is sufficient to provide Applicant reasonable compensation for the service it renders to its customers.

Authorized Increase

The additional revenue required, based on the rate of return found fair herein, is $6,377,264, computed as follows:

Adjusted Net Operating Income	$3,142,468
Net Operating Income Found Reasonable	6,379,567
Income Deficiency	3,237,099
Deficiency Adjusted for Taxes(21) (3,237,099 ÷ .5076)	$6,377,264

Revenue Allocation and Rate Design

Applicant proposed to maintain the existing rate structure and to allocate an approximately equal percentage increase to all customer classes. It also proposed changes in miscellaneous charges related to checks returned for insufficient funds,

(21) 100 less tax rate of 49.24%.

reconnection charges, late payment charges, industrial transportation charges, and industrial overruns. The Commission accepts these proposed changes and has incorporated them in Appendix A.

Profits on Sales From Storage

Applicant maintains an inventory of natural gas stored underground in zone three, the only zone in which it has any storage activity.(22) Natural gas purchased from Texas Gas Transmission Corporation is injected into storage during off-peak usage periods and withdrawn from storage to meet peak usage during the winter heating season. Therefore, a lag exists between the date the Applicant injects natural gas into storage and the date it is withdrawn and sold to its customers.

Applicant assigns to gas withdrawn from storage the average cost of all gas injected into storage. However, Applicant charges its customers the rates in its tariffs in effect at the time the gas is withdrawn from storage which include those approved in its most recent PGA filing. Since the PGA rate is designed to allow recovery of 100% of the current increase in the cost of gas purchased, Applicant is recovering more than the average cost of gas withdrawn from inventory through these rates.

In the current case, the Commission has adjusted the test year cost of gas to reflect the supplier rates in Case No. 7157-JJ.

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(22) Workpaper 240 supporting Exhibit 5, Page 10 of 17.

This results in the inclusion of a cost of gas of \$2.8941[23] per mcf in Applicant's base rates. The average cost of gas in storage at the end of the test year was \$1.7013[24] per mcf. It appears to the Commission that the cost of gas sold from inventory will be lower than the cost per mcf included in Applicant's base rates. Therefore, the Commission concludes that a hearing should be held to determine if this is in fact the case and if Applicant should be required to refund profits on sales from storage to its customers.

Summary

The Commission having considered the evidence of record and being advised, is of the opinion and finds that:

(1) The rates proposed by Applicant would produce revenues in excess of the revenues found reasonable herein and should be denied upon application of KRS 278.030.

(2) The rates and charges in Appendix A, attached hereto and made a part hereof, will produce gross annual operating revenues of approximately \$138,135,000 and are the fair, just and reasonable rates and charges that will allow Applicant to pay its operating expenses, service its debt and provide a reasonable amount of surplus for equity growth.

(3) Beginning October 1, 1981, Applicant should be required to calculate profits on sales from storage as set forth in

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(23) Appendix B of this Order.
(24) supra

Appendix B to this Order. Further, the profit on sales from storage calculated in this matter should be accumulated and recorded in Account 253, Other Deferred Credits. Further, a hearing should be held to allow the company and other interested parties to present testimony regarding profits on sales from storage.

IT IS THEREFORE ORDERED that the rates proposed by Western Kentucky Gas Company in its application be and they hereby are denied upon application of KRS 278.030.

IT IS FURTHER ORDERED that the rates and charges in Appendix A be and they hereby are approved as the fair, just and reasonable rates and charges to be charged by Western Kentucky Gas Company for service rendered on and after October 10, 1981.

IT IS FURTHER ORDERED that Western Kentucky Gas Company shall file with this Commission, within 30 days of the date of this Order, its revised tariff sheets setting out the rates and charges approved herein.

IT IS FURTHER ORDERED that Applicant shall accumulate profits on sales from storage in the manner set forth in finding number 3 of this Order.

IT IS FURTHER ORDERED that a hearing be and it hereby is set on January 15, 1982, at 9 o'clock a.m., Eastern Standard Time, solely for the purpose of allowing Applicant and other interested parties an opportunity to present testimony regarding profits on sales from storage.

IT IS FURTHER ORDERED that on or before December 15, 1981, Applicant shall file with the Commission, a schedule showing the number of mcf and average cost per mcf of the beginning balance, injections, withdrawals and ending balance in storage for each month during the period October 1, 1980, through September 30, 1981. The data for each month shall be presented in the same format as workpaper 240 filed in support of Applicant's Exhibit 5, Page 10 of 17.

IT IS FURTHER ORDERED that Applicant shall file, on or before December 15, 1981, a schedule showing the amount included in its base rates and its PGA rates to recover the cost of gas from its customers during each month for the period September 1, 1980, through October 31, 1981.

Done at Frankfort, Kentucky, this 9th day of October 1981.

PUBLIC SERVICE COMMISSION

Marlin M. Volz
Chairman

Katherine Randall
Vice Chairman

Wm Carrigan
Commissioner

ATTEST:

Secretary

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 8227 DATED OCTOBER 9, 1981.

The following rates and charges are prescribed for the customers in the area served by Western Kentucky Gas Company. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of this Commission prior to October 10, 1981.

GENERAL SERVICE RATE G-1

Rate - Net:

First 1,000 cu. ft. or less per month	$ 4.35	per 1,000 cf
Additional cu. ft. per month at	3.5813	per 1,000 cf

Minimum Charge - Net:

A. $4.35 per meter per month

Special Provisions:

E. Reconnection charge shall be $15.00. Charge for read in - read out shall be $7.50

F. A charge of $5.00 will be made to collect a delinquent bill after written notice has been sent to the customer as required by the regulations of the Public Service Commission.

G. A charge of $5.00 shall be made for each check returned for insufficient funds.

H. Customers served under this rate are subject to curtailment as described in Section 29 of the Company's Rules and Regulations. Industrial and commercial customers that fail to comply with a Company order for daily curtailment will be subject to a penalty payment of $15 per mcf. Industrial customers assigned seasonal volumes will be subject to penalty as described in Section 29.

LARGE VOLUME RATE G-2

Rate - Net:

A. All gas used $3.4413 per mcf

Penalty for Unauthorized Overruns:

A. In the event a customer fails in part or in whole to comply with a Company Curtailment Order either as to time or volume of gas used or uses a greater quantity of gas than its daily contract demand or a quantity in excess of any temporary authorization whether a Curtailment Order is in effect or not, the customer shall pay for the unauthorized gas so used at the rate of $15.00 per mcf. Billing of this penalty shall be made within 90 days of the date of violation and shall be due and payable within 20 days of billing.

INDUSTRIAL TRANSPORTATION SERVICE

Rate - Net:

Fifteen cents ($.150) per 1,000 cubic feet. Any additions or modifications of the Company's facilities required to perform this service shall be at the sole expense of the customer.

PURCHASED GAS ADJUSTMENT CLAUSE

The base rate for purchased gas for the future application of this Purchased Gas Adjustment Clause is:

	Demand/Mcf	Commodity/Mcf	Gas Rate (dkth at 1025 BTU)
Texas Gas			
G-2	$2.22	$2.6414	
G-3	2.62	2.6898	
G-4	3.00	2.7272	
Tennessee Gas			
G-2	1.99	0.3460	$2.3526
GS-2		0.4650	2.3526
Local Production		2.7759	

APPENDIX B

APPENDIX TO AN ORDER OF THE PUBLIC SERVICE COMMISSION IN CASE NO. 8227, DATED OCTOBER 9, 1981.

Calculation of Inventory Profits

The profits on sales from storage in a month will be calculated as the cost of gas recovered in rates in effect for the month for gas withdrawn from storage less the actual cost of gas from storage as reported on line 10 of page 13 of the monthly report. The cost of gas recovered in rates for gas withdrawn from storage is equal to the MCF withdrawn during the month times the cost of gas per MCF included in rates in effect for the month. The cost of gas per MCF included in rates is the sum of the cost of gas per MCF allowed in this case and the rate per MCF allowed under the purchased gas adjustment clause in effect for the month excluding any refund factors. The cost of gas per MCF allowed in this case is $2.8941, or normalized gas costs of $112,335,673 divided by normalized MCF billed of 38,815,438. The following formula is to be used to calculate the monthly profit on sales from inventory:

IP = (CGR x SS) - CGS

Where: IP = Inventory Profits

Cost of Gas included in Rates (CGR) = $2.8941 + PGA rate per MCF

Sales withdrawn from Storage (SS) = Number of MCF Reported on Page 13, Line 10 of the Monthly Report.

Cost of Gas withdrawn from Storage (CGS) = Amount reported on Page 13, Line 10, of the Monthly Report.